

**BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554**

In the Matter of)	
)	
Call Authentication Trust Anchor)	CG Docket No. 17-97
)	
)	

**REPLY COMMENTS OF
THE USTELECOM ASSOCIATION**

The USTelecom Association (USTelecom)¹ submits these reply comments in response to the Notice of Inquiry (Notice) released by the Federal Communications Commission (Commission) in the above-referenced proceeding.² Through its Notice, the Commission seeks comment on how it can further secure telephone networks against fraudulent calling activities by “facilitating use of methods to authenticate telephone calls and thus deter illegal robocallers.”³ The Commission ultimately seeks to facilitate the development of standards to verify and authenticate caller identification for calls carried over an Internet Protocol (IP) network using the Session Initiation Protocol (SIP). Central to this effort is the development of two separate standards and best-practice implementations: 1) Signature-based Handling of Asserted Information Using toKENs (SHAKEN); and 2) Secure Telephone Identity Revisited (STIR).

The comments in this proceeding from a broad range of stakeholders demonstrate strong support for implementation of the SHAKEN and STIR standards and best-practices. In addition

¹ USTelecom is the premier trade association representing service providers and suppliers for the telecommunications industry. USTelecom members provide a full array of services, including broadband, voice, data and video over wireline and wireless networks.

² Notice of Inquiry, *Call Authentication Trust Anchor*, FCC 17-89 (released July 14, 2017) (*Notice*).

³ *Id.*, ¶ 1.

to a diverse range of communications providers, a variety of stakeholders also expressed support for SHAKEN and STIR implementation, including consumer groups, the utility industry, financial organizations and call scoring companies. Multiple commenters also expressed support for many of the issues raised in USTelecom's comments.

I. The Record Demonstrates Strong Support for the Commission to Encourage – But Not Mandate – Implementation of the SHAKEN and STIR Framework.

The record in this proceeding demonstrates strong support for the Commission to encourage – but not mandate – implementation of the SHAKEN and STIR standards. Most notably, the Alliance for Telecommunications Industry Solutions (ATIS) correctly notes that “key service providers are already moving aggressively to enable the deployment of SHAKEN,” and that such providers “are already highly incented to provide call authentication to meet the needs of consumers in the competitive marketplace.”⁴ CTIA also notes that the consensus process that helped develop the current SHAKEN and STIR standards remains “ongoing,” and that until such tools are more “fully developed, used, and refined, the [Commission] should avoid any regulatory steps that could hinder innovation.”⁵

Moreover, Telcordia Technologies (iconectiv) notes in its comments, that even absent mandated deployment of such technologies, “the capabilities provided by the SHAKEN/STIR standards will enhance the Commission’s current ability to identify abusers and determine appropriate enforcement action.”⁶ In addition, iconectiv also identifies a number of other

⁴ See, Comments of the Alliance for Telecommunications Industry Solutions, WC Docket No. 17-97, p. 3 (submitted August 14, 2017) (*ATIS Comments*).

⁵ See, Comments of CTIA, WC Docket No. 17-97, p. 7 (submitted August 14, 2017) (*CTIA Comments*).

⁶ See, Comments of Telcordia Technologies, Inc. D/B/A, iconectiv, WC Docket No. 17-97, p. 3 (submitted August 14, 2017) (*iconectiv Comments*).

consumer oriented efforts that were voluntary in nature, but nevertheless yielded significant consumer benefits. These initiatives included ATIS's International Mobile Subscriber Identity Oversight Council that led to international roaming capabilities, as well as the Mobile Device Theft Prevention working group, which ultimately evolved into an industry-led and widely adopted voluntary commitment to improve handset security and deter smartphone theft.⁷ USTelecom agrees with the assessment of these commenters that regulatory mandates are therefore unnecessary.

Although USTelecom also agrees with commenters who note that not all carriers seeking to implement the SHAKEN and STIR standards are similarly placed these standards should be allowed to develop and intercarrier agreements made to facilitate wide implementation. For example, CTIA correctly observes that the use of call authentication imposes costs, and “not all domestic carriers are ready to adopt the SHAKEN/STIR framework at this early stage.”⁸ CTIA notes that this is “especially true for small and mid-size carriers,” and that “annual on-going costs of implementing a call authentication system can be substantial, particularly for small and mid-size operators.”⁹ Although, some small and mid-size carriers may have difficulty initially, testing involving equipment vendors and service providers is currently in progress and may enable the technology to be readily incorporated into vendor software upgrades.

Additionally, stakeholders representing such providers echo the comments raised by CTIA. For example, the American Cable Association (ACA), which represents smaller, rural cable providers, emphasized the Commission's acknowledgement in previous proceedings that

⁷ *Id.*, pp. 3 – 4.

⁸ *CTIA Comments*, p. 7.

⁹ *Id.*, p. 7.

recognized the need for rolling adoption of new technologies. The Commission based this recognition in part on the fact that smaller entities “generally lack the market power and resources” to drive the development of technical solutions.¹⁰ NTCA, which represents rural telecommunications companies and cooperatives, raised similar concerns.¹¹ Although, some small carriers and VoIP Service providers may have difficulty initially deploying such technology, this difficulty may be minimized where such carriers may have the option of relying upon other service providers to perform necessary authentication. However, to ensure that all network providers are able to implement and deploy the SHAKEN and STIR standards and best practices, the Commission should therefore ensure that sufficient cost recovery mechanisms are in place.

II. The Commission Should Support and Promote International Efforts to Encourage Adoption and Deployment of the SHAKEN and STIR Framework.

As USTelecom noted in its comments, the robocall ecosystem involves a variety of global actors, and a SHAKEN and STIR framework deployed exclusively within the United States will therefore face intrinsic limitations given that many illegal robocalls originate from overseas. As the Commission correctly observed in its Notice, because illegal robocalling and spoofing are global problems, “adopting authentication frameworks in the U.S. will naturally have less effect on foreign robocalling.”¹² USTelecom therefore agrees with the numerous commenters emphasizing the importance of the Commission supporting and promoting

¹⁰ *Accessibility of User Interfaces, and Video Programming Guides and Menus*, Report and Order and Further Notice of Proposed Rulemaking, 28 FCC Rcd 17330, ¶ 114 (2013).

¹¹ *See*, Comments of NTCA – the Rural Broadband Association, WC Docket No. 17-97, pp. 2 – 5 (submitted August 14, 2017) (*NTCA Comments*).

¹² *Notice*, ¶ 40.

international efforts to deploy the SHAKEN and STIR standards and best-practice implementations beyond domestic carriers.

As CTIA noted in its comments, currently only Canada and the United Kingdom have taken an interest in robocall mitigation and the utility of the SHAKEN/STIR protocol. USTelecom agrees with CTIA that while the Commission’s Memorandum of Understanding with the Canadian Radio-Television and Telecommunications Commission is an example of how the Commission can support call authentication globally, “more such MOUs are necessary, and U.S. leadership is needed to build consensus.”¹³ Similarly, ATIS notes the Commission’s “key role in coordinating with other countries regarding call authentication issues as well as in educating consumers and service providers on the value of call authentication.”¹⁴ USTelecom agrees with ATIS that “the Commission should encourage other countries to adopt call authentication frameworks that are compatible with the framework envisioned for the U.S.”¹⁵

Some commenters ask the Commission to direct its North America Numbering Council (NANC) to serve as the governance authority.¹⁶ There are several reasons why the Commission should not assign governance authority responsibilities to the NANC. First, in order for any governance authority to be effective, it must be flexible and responsive. Such governance must act quickly to address the industry’s evolving challenges; a commission advisory committee can only make recommendations, however, and prompt action can be inhibited further if the Commission then needs to initiate an inquiry or rulemaking process. Second, the Commission should allow the free market to address the need for the governance of authentication based upon

¹³ *CTIA Comments*, p. 8.

¹⁴ *ATIS Comments*, p. 17.

¹⁵ *Id.*

¹⁶ *See*, Comments of Neustar Inc., WC Docket No. 17-97, p. 2 (submitted August 14, 2017).

the clear demand by the industry. Likewise, this function is currently being served within the internet ecosystem without a regulatory authoritative body as its governance authority.

Finally, numbering policy serves fundamentally different purposes and objectives than call authentication governance. The subject matter experts assigned to the NANC address such issues as administrative modernization of the NANP and policy-oriented matters related to numbering. Such issues are fundamentally different than the more technically oriented issues such as certificate management, token or certificate acquisition and certificate life cycle. Given these unique differences, the Commission should not assign governance authority responsibilities to the NANC.

III. The Record Highlights the Importance of Ensuring Sufficient Cost Recovery Mechanisms for Providers Implementing the SHAKEN and STIR Framework.

The Commission in its Notice also appropriately seeks comment on issues related to cost recovery resulting from the implementation and deployment of SHAKEN and STIR standards and best-practice implementations.¹⁷ Given the importance and utility of the SHAKEN and STIR framework to help in the ongoing battle against robocalls, there is a compelling need for the Commission to permit cost recovery by carriers implementing this framework. USTelecom agrees with the numerous commenters in this proceeding who noted that a cost recovery mechanism for the deployment of the SHAKEN and STIR standards should be adopted.

USTelecom agrees with CTIA's assessment that "use of call authentication imposes costs, and not all domestic carriers are ready to adopt the SHAKEN/STIR framework at this early stage."¹⁸ Moreover, USTelecom also agrees that the "annual on-going costs of

¹⁷ Notice, ¶ 47.

¹⁸ CTIA Comments, p. 7.

implementing a call authentication system can be substantial, particularly for small and mid-size operators.”¹⁹

ATIS therefore correctly notes that “a stable funding mechanism must be identified”²⁰ for providers seeking to deploy the SHAKEN/STIR framework. USTelecom agrees with ACA that reductions in implementation costs “can only help to advance the Commission’s goals by promoting the comprehensive adoption of a call authentication solution among all industry segments and all operators, large and small.”²¹ ACA further notes that such an approach will help to ensure that “the improved consumer experience and network benefits of an effective call authentication solution will not be delayed by ‘adoption gaps’ that could prolong the spoofed robocall problem.”²²

IV. The Commission Should Limit Signing Authority Only to Those Providers that Hold a Valid OCN.

USTelecom agrees with ATIS, that limiting signing authority to OCN-holders, “will help to prevent bad (or careless) actors from undermining the system.”²³ USTelecom maintains that the need for accountability and control in the initial deployment of SHAKEN, far outweighs any desire for an unnecessary and overly expansive dispersal of signing authority. An approach limiting such signing authority to OCN-holders is a minimal burden but will help to ensure greater integrity to the SHAKEN framework. In addition, should unique instances arise whereby different criteria may be appropriate, USTelecom agrees that “the governance authority will be

¹⁹ *CTIA Comments*, p. 7.

²⁰ *ATIS Comments*, p. 18.

²¹ Comments of the American Cable Association, WC Docket No. 17-97, pp. 6 – 7 (submitted August 14, 2017).

²² *Id.*

²³ *ATIS Comments*, pp. 13 – 14.

able to better identify and address other legitimate criteria once the industry gains operational experience with SHAKEN.”²⁴

Noble Systems Corporation (Noble) incorrectly asserts that limiting such authority only to OCN-holders would “concentrate power in an unacceptable manner.”²⁵ Noble’s assertion, however, is misplaced. Restricting authority for signing calls only to OCN-holders would not represent any form of concentration, but would instead ensure the necessary level of accountability and supervision. Indeed, Noble asserts that such authority should be granted in a seemingly limitless manner, and could include “software application or device manufacturers,” and others. Moreover, many of the entities referenced by Noble as needing such authority – including call center services and corporations using multiple outbound providers – could have their calls signed by their underlying voice provider which has an OCN.

Conclusion.

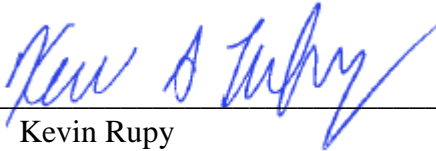
As demonstrated by the comments in this proceeding, there is strong support for the Commission to implement important components that will ensure the integrity of the SHAKEN and STIR standards and best practices. The record demonstrates strong support for the Commission to encourage – but not to mandate – adoption of these standards, and for the agency to coordinate with other international stakeholders to ensure increased international deployment. The Commission should also ensure enhanced integrity in the deployment of these standards by limiting signing authority to entities that have been assigned an OCN. Finally, by enabling cost-recovery mechanisms, the Commission will help to advance its goals by promoting the comprehensive adoption of a call authentication solution among all industry segments.

²⁴ *ATIS Comments*, p. 14.

²⁵ Comments of Noble Systems Corporation, WC Docket No. 17-97, pp. 4 – 5 (submitted August 14, 2017).

Respectfully submitted,

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